

## ABSTRACT

In order to execute a flow control and a congestion control in a hop-by-hop manner in a data communication among computers connected to different networks, in a data communication between a client A1 and a remote server B, a communication proxy of the remote server B is located in a local server A in an LAN to which the client A belongs. A communication packet to be routed to the remote server B is stolen (received) and passed to a transport layer. A TCP communication between the client A1 and the remote server B is divided into two; a communication between the client A1 and the communication proxy of the remote server B and a communication between the communication proxy of the remote server B and the remote server B.